

IBM TRIRIGA Application Platform  
Version 3 Release 7.0.1

*Readme*



**Note**

Before using this information and the product it supports, read the information in “Notices” on page 28.

This edition applies to version 3, release 7, modification 0.1 of IBM TRIRIGA Application Platform and to all subsequent releases and modifications until otherwise indicated in new editions.

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# Readme File for IBM TRIRIGA Application Platform 3.7.0.1 Fix Pack

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This fix pack updates the IBM® TRIRIGA® Application Platform product.

These release notes include the following:

- An overview of changes
- Many of the descriptions include an internal reference number (Tri-nnnnnn, IJnnnnn, IVnnnnn, and/or RFE-nnnnnn)



**Note** - The IBM TRIRIGA wiki information, formerly located on DeveloperWorks, is migrated to [IBM Docs for IBM TRIRIGA Application Platform 3.8](#). For more information, see the [IBM TRIRIGA Release Information](#) page on IBM Support.

# What's New in This Release

IBM TRIRIGA Application Platform 3.7.0.1 continues to add valuable functionality, fix defects, and reduce the effort necessary for new and existing customers to implement our products.

## Enhancements

The following enhancements to the IBM TRIRIGA Application Platform are in this release:

Area of Impact	Description
Administrator Console	Last User Action (Used for Timeout) is added to the Users Logged In page in the Admin Console. (Tri-73129)
Admin Console Rest API (Beta)	<p>TRIRIGA Application Platform includes a beta API for system administration functions.</p> <p>The Admin Console API is organized around REST based calls. Our API has predictable resource-oriented URLs, accepts form-encoded request bodies, returns JSON-encoded responses, and uses standard HTTP response codes, authentication, and verbs. Further documentation will be forthcoming in the IBM Knowledge Center.</p> <p>The Admin Console API requires Authentication and a JSESSIONID cookie token to be passed in each request to determine the authorization over what access to resources are available.</p> <p>Many of the endpoints operate on a single service instance's configuration, but there are some that impact the entire system.</p>
CAD Integrator Connector for BIM	CAD Integrator and Connector for BIM now support opening a TRIRIGA record from a graphic selection on TRIRIGA servers configured for service provider OAuth SSO. (Tri-72286)
Connector for BIM CAD Integrator	There is a new authentication type named Web Login that looks similar to the browser login of IBM TRIRIGA. (Tri-72173)
Custom Tasks - Workflow	<p>The DynamicFieldValueHelper custom task is enhanced as follows:</p> <p>Triggering the DynamicFieldValueHelper custom task allows getting field values dynamically. To use the custom task, pass the workflow parameter named triDynamicFieldValueHelpers into a workflow custom task with the class name: com.tririga.platform.util.customtasks.DynamicFieldValueCustomTask.</p> <p>The workflow parameter can contain one or more helper records that are built from the triDynamicFieldValueHelper business object (BO) in the System module.</p> <ul style="list-style-type: none"><li>- The triRecordIdNU field must contain the record ID of the IBM TRIRIGA record with the field that you want to get.</li><li>- The triFieldNameTX field must contain the field name of the field that you want to get. The following field types are supported: Text (TX), Number (NU), Date (DA), DateTime (DT), and Duration (DU). The field must be named in accordance with IBM TRIRIGA naming conventions or best practices.</li><li>- The triFieldValueTX field must contain the value of the field that you want to get. If you map a value that is not the native type (for example, a text value into a text field), this process is not supported and might not give the expected results.</li><li>- The triFieldValueNU field must contain the value of the field that you want to get.</li></ul>

Area of Impact	Description
	<ul style="list-style-type: none"> <li>- The triFieldValueDU field must contain the value of the field that you want to get.</li> <li>- The triFieldValueDT field must contain the value of the field that you want to get.</li> <li>- The triFieldValueDA field must contain the value of the field that you want to get.</li> <li>- The triDynamicActionPostBL field is added to the BO. If this checkbox is not enabled, the custom task will process the fields to get the values.</li> </ul> <p>If a non-supported BO type is used, the execution of the custom task will fail. If an error occurs, see the server log for more information. (Tri-55724; Tri-67012)</p>
Graphics	The TRIRIGA Application Platform now has REST APIs for querying, uploading, and deleting CAD drawings stored in TRIRIGA. Access to the new APIs is provided through the tririga-react-components npm package. (Tri-78734)
Integrations	TRIRIGA application developers can now access Query Data documentation, which can be used for integrations. You can access the documentation at <TRIRIGA_URL>/api/doc. (Tri-62331)
Integration Object	Calls to integration endpoints such as CBA calls, API rest endpoint calls, and Class Loader rest calls now record user activity consistent with the rest of TRIRIGA. This is to prevent TRIRIGA user timeouts when using those integrations endpoints. (Tri-73390)
Licensing	If a TRIRIGA AppServer shuts down for any reason for environments that have multiple AppServers, user sessions tied to that AppServer will be removed. It may take up to 80 seconds for the session to be removed as that is the length of time it takes for the service checking AppServer status to run its next iteration. (Tri-71299)
Licensing	When the same user logs into TRIRIGA with multiple user sessions (multiple devices, browsers, etc.), license usage will only be counted once. (Tri-71303)
Licensing	The License Manager now shows section headers describing the rows for the Matrix view of the License table. (Tri-68060)
Navigation	A new responsive login screen has been introduced that is shared by the foundation apps, UX Apps, and the Admin Console. (Tri-70429)
Navigation	Navigation items of target type Application with the open in new window checkbox deselected will now appear as selectable items in the Home Page list and the Project Home Page list on the user's My Profile page. Note that if a portal and an Application navigation item have the same name, only the portal will appear in the above mentioned lists. A warning will be displayed in server.log if this scenario is encountered. (Tri-72848)
OAuth Support	Platform OAuth support is enhanced to support OAuth refresh tokens. Refresh tokens are stored as profile extensions and can be used to grant access tokens that reduce the frequency of a user logging in to OAuth services. (Tri-67380)
Object Migration	The TRIRIGA OM API now supports the addition of objects by Object Label Name. (Tri-69065)
Object Migration	Object Migration export package creation now has a multi-select drop-down for Object Label Owner exclusion on the Create Package dialog when creating package by date. There is also the same multi-select drop-down for Object Label Owner

Area of Impact	Description
	exclusion within the Object Migration package search for object feature. The multi-select drop-down allows users to select one or more Object Label Owners to exclude from object searches, in that any objects associated with those Object Label Owners will not show up in the search results. (Tri-36565)
OSLC	OSLC is enhanced to auto-configure the OSLC Base URL so that for most deployment it does not need to be specified in the TRIRIGAWEB.properties file. When using the auto-configure option, OSLC can be used on multi-homed servers. Limitation: For servers which require LDAP login, manual configuration of OSLC Base URL may be required due to NAT. (Tri-69246)
Outlook	The Exchange Appointment BO now has the Time Stamp of incoming iCal data. (Tri-70400)
Outlook	When using the Reserve Outlook add-in, only Outlook activity within the add-in is handled as TRIRIGA user activity with regard to TRIRIGA session timeouts. Normal outlook activity such as scheduling a meeting and sending the meeting request is now not tracked as TRIRIGA user activity. (Tri-75442)
Performance	The MLA converter folder now creates only two files, the readme.txt and the .exe or .bin for the Windows and Linux executables. (Tri-67383)
Reporting	Editable queries that do not have any editable columns will now display with the enhanced query grid renderer. (Tri-71069)
Reporting	Reports that are run through the enhanced query grids now support row height selection, in addition to an option to wrap text. After running a report, users can select the Gear icon in the header of the report. A context menu will display where users can select between the following row heights: Compact 24px, Short 32px, Medium 48px, Tall 64px. The context menu also has the option to wrap text. (Tri-70067)
Reporting	The image file extension will now not be case-sensitive in enhanced render mode. (Tri-70357-IJ30235)
Reservations	The Location Reservation room search now filters the search result set so that rooms that are not available due to reservation policies are not shown in this result set. (Tri-68246)
Reservations	The following new custom tasks are now created for the Exchange integration: List all the calendar events in a date/time range for a mailbox. Query details of a calendar event including organizer and attendees.
Reservations	Workflows are enhanced so that PowerShell scripts generate valid space email addresses and an Exchange Domain length limitation is added to the field in tririgaweb.properties, EXCHANGE_DOMAIN_MAX_LENGTH. While generating email address, if the Domain length is greater than 255, the workflow throws an exception. Exchange Domain length limitation is added to the field in tririgaweb.properties, EXCHANGE_DOMAIN_MAX_LENGTH. While generating email address, if the Domain length is greater than 255, the workflow throws an exception. (Tri-71346)

Area of Impact	Description
Reservations	OSLC endpoints are added for managing the list of spaces integrated with Exchange and the room email address. (Tri-68590)
Security	The system user is now required to change the default password on first login. After new installation or upgrade, if system users log in to TRIRIGA with the legacy default password, they will be redirected to a screen that will require a password change. This change also impacts integrations, such as CAD, tri-deploy, CBA, etc. System users will no longer be able to do integrations by using the legacy default password. (Tri-79131)
Security	Resolved a reported security scan issue caused by improper scoping of a static variable. (Tri-76074; Tri-76077)
Single Sign-On	For SSO configured environments, if the user tries to login with SSO credentials that do not have access to TRIRIGA, then index.html login page is displayed with "Cannot sign into IBM TRIRIGA as you do not have a valid user" message. Earlier it was a login screen on index.html for SSO. (Tri-73450)
UX Framework	The Model Designer Builder now supports the configuration of action metadata to Workflow Datasource actions. (Tri-64136)
UX Framework	The UX Framework now supports custom applications. When developing a custom app, the developer now has full control over the application including index.html and the web technology used (React, VUEJS, Polymer, Angular, etc.). (Tri-64168)
UX Framework	The code to determine whether or not to show the Create Revision action in the UX designers no longer uses the IBS_SPEC_ASSIGNMENTS view when in Module Level Association (MLA) mode. This will improve the performance of showing the UX designer. (Tri-66880)
Workflow	Support for finding callers on the asynchronous workflows. Callers would be considered workflows that have a trigger action task for the event/BO. (Tri-72177)
Workflow	Workflow engine and builder now support the passing of parameters through a Trigger action. (Tri-68326)



## Prerequisites and Supported Products

To install this fix pack, you must have IBM TRIRIGA Application Platform 3.7 or 3.7.0.1 LAI fix pack installed.

## IBM TRIRIGA Supported Versions and IBM TRIRIGA Application Platform Compatibility Matrix

The *IBM TRIRIGA Supported Versions* lists information related to IBM TRIRIGA's supported products and platform and relays information about end-of-life plans for such software. The *IBM TRIRIGA Application Platform Compatibility Matrix* lists supported operating systems, databases, and related details for and about the IBM TRIRIGA Application Platform and relays information about end-of-life plans for such software. The *IBM TRIRIGA Supported Versions* and the *IBM TRIRIGA Application Platform Compatibility Matrix* may change over time. The *IBM TRIRIGA Supported Versions* and the *IBM TRIRIGA Application Platform Compatibility Matrix* can be found on IBM Support at <https://www.ibm.com/support/pages/node/1283650>.

**IMPORTANT NOTICES:** IBM no longer supports IBM Tivoli Directory Integrator. Migrate your TDI assemblies to a supported technology, such as Pentaho. As of version 3.6.1.2, the IBM TRIRIGA Application Platform no longer ships with or supports TDI assemblies. Due to the log4j2 upgrade, TDI assemblies will no longer work with this fix pack.

As communicated in the IBM TRIRIGA Application Platform 3.6.1.2 Compatibility Matrix, IBM does not support Oracle WebLogic with IBM TRIRIGA Application Platform version 3.6.1.2 and later. Please see the Compatibility Matrix for the full listing of compatible products and versions.

# Installing the IBM TRIRIGA Application Platform 3.7.0.1 Fix Pack

To install the TRIRIGA Application Platform 3.7.0.1 fix pack, refer to the following general instructions.

## Procedure

1. Ensure that no database configuration changes are pending and there are no entries in the WF\_EVENT or EF\_QUEUE tables. You can check the status of these tables by running the following SQL statements: `select count(*) from WF_EVENT` and `select count(*) from EF_QUEUE`.
2. For IBM WebSphere® Application Server Liberty Core profile, stop all application servers before continuing the installation.
3. For IBM WebSphere Application Server, confirm that this server is started and stop all other application servers.
4. Take a backup of the database and the existing TRIRIGA install directory for each server. If necessary, you can use the backups to revert the system.
5. Download the 3.7.0-TIV-TAP-FA001 file.
6. Extract the file. You can extract the fix pack file into any directory.
7. Run one of following patch executable files: `fixpack_tririga_v3.7.0.1_Windows.exe`, `fixpack_tririga_v3.7.0.1_Linux.bin`, or `fixpack_tririga_v3.7.0.1_AIX.bin`.
8. In the Introduction pane, select **Next** or **Enter**.
9. In the license agreement, accept the terms and select **Next** or **Enter**.
10. Choose the directory where IBM TRIRIGA is installed. For example, the following directories:  
`c:\ibm\tririga\` or `/opt/ibm/tririga/`.
11. Review the information and select **Next** or **Enter**.
12. The fix pack process patches the WAR file and runs any platform database fix pack scripts.



**Note** - In the patch folder for the 3.7.0.1 fix pack, when the fix pack installer backs up the `ibm-tririga.war` file, the backup `.war` file appears as the `ibs-tririga.war.bak` file.

13. For WebSphere Application Server Liberty Core profile, the WAR file deploys and the cache directories are removed. You must restart Liberty.
14. For WebSphere Application Server, the WAR file redeploys and starts automatically. If it fails, you need to manually redeploy the WAR file. The WAR file is located in one of the following TRIRIGA install root directories: `c:\ibm\tririga\ibm-tririga.war` or `/opt/ibm/tririga/ibm-tririga.war`. Refer to IBM's instructions for deploying a `.war` application.
15. For WebSphere Application Server only, a manual update might be needed to the WebSphere JVM arguments to enable the log4j2 feature logging. When you go to the TRIRIGA Administration Console and click the Error Logs tab, if the logs are not displayed correctly, you must complete the following steps to manually update the WebSphere JVM arguments:
  - a. Stop the TRIRIGA WebSphere Enterprise Application.
  - b. Manually update the Generic JVM arguments to include the following line:

```
-Dlog4j2.configurationFile=file:<INSTALLATION  
PATH>/config/log4j2.xml
```

where `<INSTALLATION PATH>` is the full path where TRIRIGA is installed.

The path to access the Generic JVM arguments is as follows:

**Enterprise Applications** > `<IBM-TRIRIGA application name>` > **Target specific**

**application status > <server name> > Java and Process Management > Process definition > Java Virtual Machine**

where <IBM-TRIRIGA application name> is the TRIRIGA WebSphere Enterprise Application name and <server name> is the server name.

- c. Apply and Start the TRIRIGA WebSphere Enterprise Application.

**Note:** If you don't update the WebSphere JVM arguments correctly, the TRIRIGA logging might not work properly. To verify this, go to **TRIRIGA Administration Console > Error Logging**. If you don't see any logs, the manual update has not been done properly.

16. After upgrading to log4j2, the config/log4j.xml file is no longer used to configure log4j. Use the new log4j2.xml file in the config directory. If you have custom log4j settings, you can review and update the settings accordingly. For more information, see the [log4j documentation](#).
17. Delete the log4j-boot.jar file manually from the lib directory as it is no longer used by TRIRIGA Application Platform.

#### What to Do Next

After the fix pack install completes, check the platform release in the IBM TRIRIGA Administrator Console. Verify that the fix pack you just installed is listed.

# Important Information

The following items are important information concerning the IBM TRIRIGA Application Platform.

Area of Impact	Description
Application Server	It is found that WebSphere 9.0.0.x has known session store issues and therefore, it is strongly recommended that if you use WebSphere, then you must use version 9.0.5 or later. (Tri-83451)
Installation	Arabic, British English, Danish, Dutch, Finnish, Hebrew, Hungarian, Norwegian, Swedish language license agreements are not available. Refer to the default English version. (Tri-77253)
Installation	The 3.7.0.1 fix pack will process several upgrade scripts on the first server start up. Therefore, unlike previous fix packs, 3.7.0.1 will take longer time to start up. To monitor the startup progress, you can track the server.log located in the <install directory>\log folder.
Object Labels/Licensing	Because of extensive changes involved in the upgrade of log4j and other updates required to resolve critical issues, some of the objects, ILMT license files, and other objects related to those changes are labeled as version 4.1, referring to the version from which these updates were originally made and backported from.
Record Runtime	If a database server is slow and you try to create a large number of hierarchy records with the help of the Data Integrator and asynchronous workflow, there is a possibility that the hierarchy path (triPathSY) of some records will not map properly. To resolve this, you can either delete incorrect records and recreate them or you can create a patch helper to fix those records. (Tri-58454-IJ21094)
Reporting.	Resolved an issue with the queries run through enhanced query rendering grids where the header filter value was not honored. The header filter values were clearing out after the user entered an additional filter value in one of the Show more filters fields and pressed Enter. (Tri-80268-IJ39460)
Reporting	An issue that would cause summary row totals to not be displayed if the decimal separator was a character other than '.' is resolved. (Tri-72613-IJ32431)
Reporting	The sum on financial roll-up fields is now displaying. (Tri-74172)
Security	After installing the fix pack, you might still see log4j-boot.jar located in the <install directory>\lib folder. This file is no longer used by TRIRIGA, and you can delete it if it is flagged during system scanning.
Single Sign-On	When Single Sign-On (SSO) is implemented in a specific TRIRIGA application server, native (internal) authentication is disabled for the standard browser-based interfaces. This means you can no longer have one set of users authenticate natively and another using SSO for that specific application server.  Native authentication may still be allowed via another application server where SSO is not enabled, such as a process server.

## Known Limitations

The following known limitations concerning the IBM TRIRIGA Application Platform are newly added for this release.

Area of Impact	Description
Administrator Console	For installations using Module Level Associations (MLA), there should be a performance analysis of any SQL that access the IBS_SPEC_ASSIGNMENTS table. The IBS_SPEC_ASSIGNMENTS table is still usable, but it is a view and may not perform well. This includes but not limited to the shipping WPM ETLs, the BIRT disclosure reports, and other custom ETLs, reports, and SQL. (Tri-67576)
Installation	For DB2 on Websphere Liberty, jdbcCollection="NULLIDR1" needs to be added to the properties.db2.jcc in server.xml. This is necessary for performance optimization. (Tri-80596)
Login	'The user <username> is already active' popup will not appear if the user logs in when more than one user sessions are active. This is resolved in a later version. (Tri-83292)
Login	The 'Click here to sign in again' link is not navigating the user to the login page after the session expires. This is resolved in a later version. (Tri-83234)
Login	There is a Chrome and Edge browser limitation where user auto-filled usernames and passwords are not automatically enabling the continue button on the login screen. (Tri-72065)
Login Page	For the Safari browser, the login page responsive design might distort while decreasing or increasing the window size and screen sizes 865 and above. (Tri-75537)
Navigation	If the 'Render in a new window' checkbox is selected when a navigation item is created with a valid dynamic label, the label is not currently updated. (Tri-64068-IJ26209)
Record Runtime	In the Planned section of a work task record, if the Planned Duration (Due Within) field is one week or more, then the Planned End (Due Date) and Planned Working Days might not be calculated correctly. To resolve this issue, you can use either one of two workarounds. The following examples display a result of 7 days: <ul style="list-style-type: none"> <li>- Due Within field value: In the Details section of the service matrix record, in the Due Within field, enter a value of 9 days. When you open the work task record, the Planned Working Days show 7 days.</li> <li>- Due Within display mask: Open the Form Builder to revise the Service Matrix (triServiceMatrix) form. In the Details section of the service matrix record, change the Due Within field properties to display Day(s) only and publish your change. When you return to the Details section of the service matrix record, in the Due Within field, enter a value of 7 days. When you open the work task record, the Planned Working Days shows 7 days. (Tri-62948-IJ22876)</li> </ul>

Area of Impact	Description
Reporting	When using 'more than or equal to' and 'less than or equal to' field filters on date/time fields (DT), days immediately after or immediately before the filter value may not be correctly returned by the filter.
Reporting	For users with a Date and Time format that includes a ZZZ timezone token, Data and Time query filters might not display accurate results in certain scenarios if the timezone part is entered into the filter value. (Tri-77134)
Reporting	Text fields with Type field set to DateTime or Date type incorrectly show data in milliseconds on the editable query results page. (Tri-54627-IJ08888)
Reporting	The wrap text feature on reports displayed via the enhanced query grid will visually make grid row height slightly smaller if the row height has been set to 64px. (Tri-74584)
Reporting	In Safari, for the enhanced render query grid, the blue focus is displayed by default on the first element in the row size drop-down menu when the menu is selected. (Tri-74334)
Reporting	The ellipses of the overflow menu for manager queries might appear truncated when a record is open in the inline view from that manager query. (Tri-74402)
Reporting	On reports rendered through an enhanced grid, a horizontal scroll appears at the bottom of pinned columns even though visually a horizontal scroll is not necessary. (Tri-71983)
Reporting	For the Safari browser, entering values in the more filter feature on reports run through the enhanced query grid might have a false positive of returning no results. (Tri-77022)
Reporting	For queries displayed in portal sections, the Apply and Clear filter links might display in scenarios where there are no filters. (Tri-75024)
Reporting	When filtering a Date and Time field on a TRIRIGA query, users might get unexpected results if their user profile date-time format is: MMMMM dd, yyyy hh:mm a zzz, and they leave off the timezone part in their filter value. (Tri-74890)
Reporting	For reports that have a user-defined column width specified on a group column, the specified column width may not take effect on the group column but instead affect the adjoining column when rendered through the enhanced query grid. (Tri-66609)
Reporting	Hierarchy queries displayed through the enhanced grid view may not get sized correctly if they have a group report as a child. Extra whitespace might be seen on the child query. (Tri-66121)
Reporting	If a large number of queries, actions are defined in certain scenarios on a maximized portal section that is rendering a query with the enhanced query grid view, the overflow menu may not display all the actions. (Tri-66167)
Reporting	On some pop-up queries, such as locator pop-ups that display with the enhanced query rendering grid, an unnecessary horizontal scroll bar may display. (Tri-66387)

Area of Impact	Description
Reporting	On some query sections displaying the enhanced query rendering grid, if no data is in the results, the no data to display text may overlap the query header. (Tri-66391)
Reporting	Some pop-up dialogs, such as "Find" lookup dialogs that render with the enhanced query grid, may appear to have their footer cropped off if launched from a smaller form. The dialog can be dragged up to make the footer visible by clicking and dragging in the white border of the dialog. After you drag the dialog to the appropriate position, you may need to double-click in the white border to release dragging mode. (Tri-66477)
Reporting	User-defined column widths defined in a prompt before query report that is rendered with the Enhanced Report Renderer may not be honored after the display is refreshed. Initially, the custom column size shows, but after a refresh, the customized sizing may be replaced by sizing that maximizes the data displayed in the grid. (Tri-66608)
Reporting	In some scenarios where a column label is too large in the enhanced query grid view, the far-right column context menu may appear clipped. Users can see the entire the context menu by dragging the column size larger. (Tri-66166)

# Changes

The following changes to the IBM TRIRIGA Application Platform are in this release:

Area of Change	Description
Administrator Console	Resolved an issue where the server session timeout pop-up warning dialog was not displayed within the SESSION_WARNING_THRESHOLD configured in the TRIRIGAWEB.properties file. This is applicable when the SESSION_WARNING_ENABLED property is set to Y in the TRIRIGAWEB.properties file. (Tri-77332-IJ36134)
Administrator Console	Users should be able to log in to the TRIRIGA Process Server Admin Console with account ID in uppercase even though the following setting is set to 'N': USERNAME_CASE_SENSITIVE = N (Tri-73883-IJ32902)
Administrator Console	The In Memory Smart Object debugging mode drop-down selector is now located in the Administrator Console on the Workflow Agent Info page. (Tri-75647)
Administrator Console	An additional warning is added to the Administrator Console if changing WF Instance logging to always. This is a debugging tool only and must not be used in Production. In addition, there is a limit to the number of instances that are saved and if you go over the limit, instances will not be saved and other workflow items such as action items will also not be saved. (Tri-72617)
Administrator Console	Error handling is now improved if something similar to the following encountered in server.log: ERROR [html.en.default.smartrecord.jsFunctions](Default Executor-thread-12) java.lang.IllegalStateException: SmartRecordUtils.populateDefaultData method must be called before calling this method. This error will now include a stack trace. (Tri-75563)
Administrator Console	For SQL Server, the Database Connection showed in the Administrator Console on the Admin Summary and System Info tabs now contain the server name, port, and database name. (Tri-73616)
Administrator Console	In DB2 only, when running the Database speed test in the Admin Console, if the row count of ibs_spec_assignments is greater than 2,147,483,647 rows, it will no longer throw an exception. (Tri-71005-IJ30891)
Administrator Console	The two new categories are added to the Platform Logging page of the Admin Console, i.e. Security Logging and XSS Logging. This is in addition to the already existing Verbose Security Logging. (Tri-73835)
Administrator Console	The font text color and font size are changed in the cache tab of the Administrator Console. (Tri-61282)
Administrator Console	When using Module Level Associations (MLA), the Deep Clean function in the Administrator Console no longer uses the IBS_SPEC_ASSIGNMENTS view. This improves the performance of Deep Clean. (Tri-64050)
Administrator Console	Deep Clean in the Administrator Console now removes records where the ASS_SPEC_ID or the referenced record is invalid. (Tri-64405)



Area of Change	Description
Administrator Console	The Deep Clean algorithm in the Administrator Console is updated to be more efficient when deleting large batches of data. (Tri-66324)
Administrator Console	Non-functioning Broadcast Message actions in the TRIRIGA Administrator Console are removed. (Tri-66434-IJ25536)
Administrator Console	The Deep Clean function in the Administrator Console now works properly with Microsoft SQL Server. (Tri-66453)
Administrator Console	In DB2, the stored procedure used by the Maintenance Scheduler for the Cleanup Agent or Cleanup Commands that determine the tables or indexes to reorganize and run stats no longer fail with the exception 'A value cannot be assigned to a host variable because the value is not within the range of the host variable's data type SQLCODE=-304, SQLSTATE=22003'. (Tri-66524)
Administrator Console	Module Level Assignments functionality has been renamed to Module Level Associations. (Tri-67576)
Administrator Console	Managed Processes is no longer supported and has been removed from the Administrator Console. (Tri-68652)
Audit	Audit Comment dialogue pop-up will now display for "Add", "Remove", and "Activate". (Tri-74000)
Browser Title	An issue where the title in the browser tab shows the incorrect location when a UX Application opened in a new window is resolved. The title was incorrect on the browser tab for the window that opened the new window. (Tri-73806)
Calendar	In the calendar Day/Month view, dates are displayed correctly as per user selection. (Tri-73388-IJ32983)
Calendars	To create a 24-hour Availability Calendar, the Start Time must say "0:00 AM", the End Time must say "24:00 AM", and the # of Hours must say "24". This information is now included in the IBM Knowledge Center. (Tri-65939-IJ26106)
Capital Project	CBA API now honors date format specified in IBM TRIRIGA user profile. (Tri-72366-IJ33046)
Connector for Business Applications	The Connector for Business Application (CBA) operation runNamedQueryMultiBoLocalized is enhanced to support localized filters based on the language of the TRIRIGA user that triggers the CBA request. (Tri-64577-IJ24682)
Connector for Business Applications	An error no longer displays when executing runNamedQuery against some business objects in the Mail module. (Tri-66849-IJ26454)
Connector for Business Applications	The UNSUCCESSFUL_LOGIN_ATTEMPT setting in the TRIRIGAWEB.properties file no longer causes issues with WSDL URL login. (Tri-67543-IJ26389)
Currency Conversion	An issue with currency conversion rates in Brazilian Portuguese is now fixed for different date formatting types. (Tri-67652-IJ27188)
Currency Items	The common-io library has been upgraded. (Tri-79857)

Area of Change	Description
Currency Items	The taglibs-standard-impl JAR file has been upgraded. (Tri-79726)
Currency Items	The xmlbeans JAR file has been upgraded. (Tri-79734)
Currency Items	The batik JAR file has been upgraded. (Tri-79729)
Currency Items	The cxf-core JAR file has been upgraded. (Tri-79730)
Currency Items	The fluent-hc JAR file has been upgraded. (Tri-79854)
Currency Items	The jstl JAR file has been upgraded. (Tri-79725)
Currency Items	The mpjx JAR file has been upgraded. (Tri-79728)
Currency Items	The ognl JAR file has been upgraded. (Tri-79723)
Currency Items	The jackson-databind JAR file has been upgraded. (Tri-79732)
Currency Items	The hibernate-validator JAR file has been upgraded. (Tri-79856)
Currency Items	The db2jcc4 JAR file has been upgraded. (Tri-79731)
Currency Items	The dom4j JAR file has been upgraded. (Tri-79733)
Currency Update	TreeGrid has been updated to 16.02.01. (Tri-64167)
Currency Update	Log4J has been updated to Log4j-2.17.2. All log4j-1 components have been removed. (Tri-79207)
Currency Update	<p>Unlike previous fix pack installers, this fix pack updates the Liberty profile and files to support the new Log4j2 upgrade. The following files were updated:</p> <ol style="list-style-type: none"> <li>1. jvm.options: The log4j entry was updated to use log4j2.</li> <li>2. server.xml: The log4j entry was updated to use log4j2.</li> <li>3. Added the log4j2.xml to the config directory.</li> </ol> <p>(Tri-82304)</p>
Currency Administrator Console	<p>TRIRIGA Administrators will notice the following differences in the Platform logging functionality after the migration to log4j2:</p> <ol style="list-style-type: none"> <li>1. The name for the active log file will no longer contain the date, it will simply be of the form &lt;log_name&gt;.log for example the active security log file will be named security.log</li> <li>2. Any customizations that customers have made to the log4j.xml will need to be re-applied to the log4j2.xml. Make sure to follow the xml configurations specified by apache here:  <a href="https://logging.apache.org/log4j/2.x/manual/appenders.html">https://logging.apache.org/log4j/2.x/manual/appenders.html</a></li> <li>3. When log files automatically roll over nightly the year, month, and day will be appended to rolled log in the following format:  &lt;log_name&gt;-yyyy-MM-dd.log</li> </ol>

Area of Change	Description
	<p>For example, when the server log rolls over at midnight, the active log file will now be server.log and yesterday's log file would be server-2022-05-21.log</p> <p>The frequency of automatic rollover and the naming convention of the log files is configurable in the log4j2.xml. For more info on configuring the rolling features of the RollingRandomAccessFile appenders please visit the following link:  <a href="https://logging.apache.org/log4j/2.x/manual/appenders.html">https://logging.apache.org/log4j/2.x/manual/appenders.html</a></p> <p>4. When a user manually rolls a log file a time suffix (an underscore followed by the hour, minute, second, and milliseconds) will be appended to the file pattern specified in the log4j2.xml. For out of the box installations this would look like:</p> <p>&lt;log_name&gt;-yyyy-MM-dd_HH-mm-ss-SSS.log</p> <p>For example, after rolling the server log the active log will server.log be and the rolled log would be server-2022-05-21_9-25-56-001.log</p> <p>This time suffix is not currently configurable in the log4j2.xml.  (Tri-79361)</p>
Connector for BIM	The DXF version used to publish floor plans to TRIRIGA is now ACAD 2018. This improved the rendering of floor plans with holes in the middle. (Tri-58758)
Data Modeler	BO Publish code will do the same logic as the Module-Level Associations (MLA) converter and add an MA table if the BO has a module_view_map.module_view_name. (Tri-71775-IJ31227)
Data Modeler	Business objects created where the BO system fields Location, Geography, and Organization display as name, will be displayed correctly as path. (Tri-65147-IJ26320)
Document Management	When setting permissions for Folders in Document Manager, the propagation settings under the Permissions tab will now be accurately processed. "Propagate them to all child folders, documents, and publications" will now properly propagate the permissions to folders, documents, and publications. Additionally, an issue has been resolved where permissions might have been propagated to documents when "Propagate them to child folders only" was selected. (Tri-74754-IJ33882)
Document Management	After creating a capital project and applying template to generate document hierarchy automatically, the hierarchy is now synchronizing properly across multiple servers. (Tri-78729-IJ38290)
Document Management	In a Module Level Association (MLA) enabled database, the SQL used for removing associations when deleting objects in the Document Manager is improved. (Tri-63287)
Document Management	The Advanced Room Search Add-in does not support X-Frame-Options set to SAMEORIGIN. (Tri-67094-IJ26069)
Document Management	If a user's organization changes and they upload a new document, the new document is stamped with the new organization and the user should be able to see the new document. Users may lose access to previous documents depending on the new organization. (Tri-64266-IJ24949)

Area of Change	Description
Document Manager	'Modified By' field of Folder BO is now updated properly to no longer populate wrong value. (Tri-66055-IJ27109)
Exchange Integration	The TRIRIGA server no longer requires a restart after updating the Exchange settings in Application Settings. (Tri-72545)
Form Builder	Documentation is updated to clarify that the Pre Form Workflow should not be confused with the Pre-Popup Workflow that is used with state transition actions. The latter cannot be used to manipulate forms through workflow mappings. The form in the Popup Form property will be displayed only and cannot be changed or manipulated by using this workflow or its mappings. (Tri-66619-IJ26854)
GIS	Resolved an issue with TRIRIGA and Esri integration where layers other than TileLayers were not getting displayed. (Tri-73764-IJ35345)
GIS	A TRIRIGA Esri integration issue around large number of pins causing slow performance of Esri maps is now improved. Pins will no longer re-draw themselves on zoom in/zoom out, or when dragging the map. Pins will no longer appear in individual layers when viewing the Show Options tab. The issue related to Open Record link on the pin detail window not opening the record when clicked is also resolved. (Tri-74810)
Gantt	Task hierarchy is showing up correctly on the Gantt chart now. (Tri-70745-IJ30383)
Gantt	MPP file Import in the capital project now displays the Gantt chart properly with dependency lines and no dots. (Tri-73704-IJ33423)
Globalization	The French language pack now shows the correct translations. (Tri-66309-IJ5968)
Globalization	The label for the Reject action button is translated in the current language pack. (Tri-66542-IJ26298)
Graphic Sections	The following error messages will no longer appear in the browser JavaScript console during rendering of graphic sections: ReferenceError: Not defined, TypeError: Cannot read property 'loading' of undefined, TypeError: Cannot read property 'exporting' of undefined. (Tri-73363)
Installation	The platform release version has been updated to 3.7.0.1. (Tri-82041)
Integration	OSLC Resource Manager will now work properly, even if there is another BO with the same name as the selected BO. (Tri-74726-IJ35149)
Integration Object	A new field, Query Batch Size is now added to the Integration Object outbound file scheme that allows control of the internal result batching Integration Object with TRIRIGA queries. By default, query data is incrementally processed by Integration Object in batches of 999 records until all results are written to the output location. This default batch size is intended to prevent potential memory issues on the TRIRIGA servers. Use the Query Batch Size field to adjust the batch size (-1 will not batch the query data). This setting should be used with caution as it can impact the performance of the TRIRIGA servers. Note: For the Integration Object records that run via Workflow tasks, the maximum batch size will be 1000 when passing the record filter values into the CustomTask parameter due to SQL limitations with the number of values in an IN clause.

Area of Change	Description
	Additionally, for the JSON and XML export file types, the “Exceed 999 Result Limit and Return Maximum?” check box “ is now re-labeled as “Do Not Limit Results to First Batch?”. The functionality remains the same as per the prior releases, but the new label is more compatible with the new Query Batch Size field. (Tri-76839-IJ35520)
Integration Object	An issue in the Integration Object is resolved where the header contains more than one ":" in HTTP Post Integration. (Tri-72952-IJ33114)
Integration Object	Integration Object will only warn once when there is no association information when creating a new record. (Tri-68942-IJ29554)
Integration Object	The runNamedQueryMultiBo operations in the Connector for Business Applications (CBA) now handles zero value dates, such as 01/01/1970, when the TRIRIGA server is on the UTC time zone instead of returning a blank. This change impacts integration points that use runNamedQueryMultiBo CBA operations such as Integration Object functionality to export TRIRIGA query data. This change is consistent with the way other areas of the TRIRIGA platform handle zero value dates. (Tri-61863-IJ20768)
Inventory	For inventory items, the summary row now displays the corresponding currency. If the summary row contains different currencies, the total displays with an icon and message "No summary value calculated due to mixed units". (Tri-72193-IJ31897)
Lease - Real Estate	Export data from any report is now working properly for multiple attempts. (Tri-74143)
Lease - Asset and Real Estate	Collapsible query sections no longer sometimes cause the browser to freeze and javascript console errors such as 'accessing a cross-origin frame'. (Tri-75147; Tri-75292)
Lease - Asset and Real Estate	When creating a new lease, it is recommended that the duration be set to a maximum of 99 years to ensure that lease calculations work as expected. An update to this guidance will be issued in a future version of the product. (Tri-67131-IJ26222)
Lease - Asset and Real Estate	The correct number of payment line items is now displayed when creating a new lease in the Brazilian time zone. (Tri-69022-IJ28224)
Licensing	An issue is resolved for a user logging in who no longer has project access but was last logged into a project. User will be switched to the Company Level. (Tri-71738)
Licensing	Some Reserve privileges have been removed from the IBM TRIRIGA Integrated Workplace Manager license as Reserve is not part of the IBM TRIRIGA Integrated Workplace Manager license. (Tri-77170)
Licensing	The ability to create new Modules, Business Objects, and Workflow is now controlled by access to the Application Builder Technology instead of checking for specific licenses. This also affects some UX admin tasks when the user is not an admin user. (Tri-71708)

Area of Change	Description
Licensing	The license checks for CAD Integrator, CBA (Business Connect), and OSLC are updated to check for a Technology instead of any specific license. (Tri-18632)
Licensing	Users with license access to Form Builder and not the Data Modeler will now be able to access the Form Builder. (Tri-74807)
Licensing	Real estate users now have access to the triCostEstimate > triLeaseTreatment business object. (Tri-68294)
Licensing	Licensing is updated to allow a user with either the IBM TRIRIGA Facilities Manager or IBM TRIRIGA Workplace Reservation Coordinator license to create survey questions for reservation surveys. (Tri-68484-IJ28411)
Locations	Resolved "Certain ARIA role must contain particular children" accessibility compliance issue in item per page list in enhanced report renderer. (Tri-68654-IJ29841)
Locations	Resolved "Required ARIA attributes must be provided" accessibility compliance issue in item per page list in enhanced report renderer. (Tri-68712-IJ29271)
Locations	Users in French and other languages can create Floor and Building records without encountering any errors. (Tri-67274)
Login	Additional details for adding images to the alternate login page have been added to the Design Guidelines section of Readme.txt in <TRIRIGA_HOME>/userfiles/alt. Also, the description for the LOGIN_PAGE_RESOURCE_LIST property in TRIRIGAWEB.properties has been updated. For more information about alternate login page and login page styling, contact IBM Support. (Tri-75439; Tri-72674)
Lookup Queries	The Classification Type field has a Lookup Query assigned in the Form Builder that considers the field value for the filter and displays the result with a text value in the runtime filter. (Tri-70196-IJ29881)
Module Level Associations	The Module Level Associations (MLA) README.txt is updated to include a sentence about checking indexes on the IBS_SPEC_ASSIGNMENTS table. (Tri-70500)
MLA Converter	The Platform fix pack installer has been updated to deliver the Module-Level Associations (MLA) converter. (Tri-75088-IJ34608)
Navigation	When you delete Security Groups, they will now be removed from any Navigation Builder Group override that they are part of and also from the Navigation Builder Group override drop down list. (Tri-67191-IJ26207)
Navigation	The core platform owned UX Applications will no longer appear in Navigation Builder's Navigation Item Application drop-down. (Tri-79438)
Navigation	If you click the Cancel button on the legacy session timeout dialog, you will now be logged out of the session and then, redirected to the login page. (Tri-78064)
Navigation	An issue is resolved where Navigation Items of External URL type were failing with a file not found error when clicked. This fix also resolves an issue where the Add to Bookmarks header bar was not

Area of Change	Description
	displaying for Navigation Items of Application type that are not defined to open in a new window. (Tri-74823)
Object Migration	Performance improvements around creating Object Migration packages by date and Object Migration search functionality for type Application and type Web Component are now available. (Tri-77849)
Object Migration	The default value for a date or date time field in a business object will now be imported correctly in Object Migration. (Tri-76313-IJ35808)
Object Migration	A note was added to the <a href="#">IBM Docs</a> documentation for Object Migration that says the following: "Use the Record Data object type only for moving setup data, templates, and other items that are imported once and used as a template thereafter. Object Migration is not meant to move data from one environment to another, including data in work task templates and user message records. For supported tools that move data from one environment to another, see Integrating data with external applications." (Tri-72668-IJ32532)
Object Migration	An issue is resolved where the automatic Object Migration import process during platform upgrade was failing to revise, label, and cleanup platform delivered UX metadata. (Tri-74523)
OSLC	OSLC Request throwing Exception java.lang.ClassCastException is now resolved. (Tri-74202-IJ33732)
Outlook	The Microsoft OAuth refresh token now functions correctly. (Tri-71194)
Performance	Object labels are no longer recorded in the performance log and server log during performance logging of metric queries and extended formulas. (Tri-72818)
Performance	A new index is added to the BUDGET_TRANSACTION table to improve POST FinancialTransaction transition. (Tri-66457)
Portals	Resolved an issue where when viewing portal section queries with related reports in accessibility mode, the Add To Bookmarks button was incorrectly showing up after a related report was selected. (Tri-75407-IJ354006)
Portals	<p>Per IBM design guidance, UX Applications that are configured to not open in a new window, will be contained within the TRIRIGA navigation but will not display the bookmark or open in new window action bar in their header.</p> <p>Additionally, when UX Applications that are configured in this way are opened in a new window or new tab by using the browser open in new window or new tab options, the UX Applications will open outside of the TRIRIGA navigation container.</p> <p>Note, UX Applications that are used as a user portal home page will still show the bookmark / open in new window action bar in their header. (Tri-78032)</p>
Portals	<p>The query portal sections using the enhanced rendering grid will now honor the result size setting in portal section builder. The result size will be honored when set to below 100.</p> <p>Note: The pagination footer will remain, so that the users can paginate through the results. (Tri-78870- IJ37279)</p>

Area of Change	Description
Portals	IBM Plex now displays on the Performance Metrics and Related Links portal sections. (Tri-69320)
Query Sections	Vendor details are now populated as expected when you click Remit To Look Up magnifying glass and select the vendor under the Remit To section. (Tri-75235-IJ34614)
Record Runtime	The default Time value defined on the field in the data modeler will be used when a record is created. (Tri-74297-IJ34257)
Record Runtime	Clear action on the locator field will also clear field values linked to it (if any). (Tri-70304-IJ30599)
Record Runtime	Duration display values will no longer show blank or incorrect HTML space characters if the duration value falls below the lowest defined duration display token for the field. In this scenario, the duration display value will now show 0 followed by the lowest defined display token for the field. For example, 0 Months. (Tri-70153-IJ30260)
Record Runtime	Audit comments will now display for Add. (Tri-68902-IJ29946)
Record Runtime	The following note was added to the documentation: The state-transition temporary support for validations should avoid using Trigger Action tasks that call state transitions which call custom actions (such as platform Enterprise JavaBeans (EJBs)). The reason is that some of the custom action implementations can save temporary data as part of their work. (Tri-71132-IJ30522)
Record Runtime	When Audit actions are enabled, the username is now correctly printed in the username column instead of the record name. (Tri-70782-IJ29838)
Record Runtime	When Module Level Associations (MLA) is used, the 'Cascade Read Only' functionality is now updated to optimize the SQL needed to determine whether a record should be read only based on its 'parent'. This functionality as previously implemented, will only traverse four levels deep to determine the read-only status of a record. (Tri-63123)
Record Runtime	Currency Fields that do not have 'Use Custom UOM Precision and Mask' enabled now round based on the UOM-defined display mask. The UOM's defined decimal field will be used to parse the display mask to find precision and assist with rounding. Unexpected results may occur if the decimal field defined on the UOM is not the same as the decimal in the display mask. (Tri-65647-IJ25123)
Record Runtime	In US language, the numeric field value is changed from 5000.00 to 5,000.00; in French language, the numeric field value is changed from 5000.00 to 5 000.00. For numeric field validation, spaces are not allowed while validating and result in an alert message for French users. (Tri-66172-IJ26939)
Record Runtime	Brazilian Portuguese currency fields no longer add extra values. (Tri-67765-IJ27647)
Record Runtime	The desired data is fetched while accessing records that contain apostrophe(') in the column name or record name when using the



Area of Change	Description
	GEO_ORG_SECURITY_CONTRIBUTE_BEHAVIOR=PATH in TRIRIGAWEB.properties. (Tri-68158-IJ28392)
Report Scheduler	When you refresh or submit a form while using the Report Scheduler, the static values are restored to their default values. This is the standard behavior of static dropdown fields in the form. This information is added to the documentation for the Report Scheduler. (Tri-65253-IJ26877)
Report Scheduler	The processing spinner works as expected after clicking the email action on manager queries that use the enhanced rendering grid. (Tri-72536)
Record Runtime	Clear action on the locator field will also clear field values linked to it (if any). (Tri-70304-IJ30599)
Reporting	For enhanced query rendering grids, the grid context menu that contains the Copy option and sometimes the Export Excel option will now automatically hide when the grid is out of focus. Also, the context menu will no longer display if the query returns no results. (Tri-79251-IJ34265)
Reporting	An issue that caused pagination footer to be displayed even though the reports run through the enhanced query grids returned no results has now been resolved. (Tri-IJ37483-78389)
Reporting	For queries with a footer sum row that are run through the enhanced rendering grid, the footer sum row will not display if the query results return no data. (Tri-79659)
Reporting	Number fields with the value zero are now sorting correctly, through manual sort or with order by defined in the query design. The issue has been resolved for the TRIRIGA query types: Query, Report, Summary and Hierarchy. (Tri-76838-IJ35712)
Reporting	An issue where context menus displayed on the enhanced query grids with zero to only a few rows were being clipped and hidden has been resolved. The issue was mainly occurring on form query sections. The context menu will now fully display within the grid container and will be big enough to display a scroll bar so all menu items can be accessed. (Tri-75748-IJ35012)
Reporting	Resolved an issue where chart reports were displaying an MID error at runtime when the field representing the main group by column defined on the report no longer exists on the business object. Any invalid group by fields will now be ignored at runtime and a warning will display in server.log. Only the remaining valid group by columns, if any will be used at runtime in this scenario. (Tri-77325-IJ36479)
Reporting	Resolved an issue where group totals were not showing the group row header in reports with sum columns run with the enhanced rendering grids. Note: If the results of the query have inconsistent currencies the group totals may have unpredictable formatting results. (Tri-78153-IJ37236)
Reporting	Reports run through the enhanced query grids will no longer show the pagination footer if no results are returned. (Tri-IJ37483-78389)

Area of Change	Description
Reporting	Scaling is improved in metric reports. The y-scale values of the column chart is now set correctly. (Tri-64657-IJ24523)
Reporting	When drilling down in a graph report, graph filter values are added. User filters can be applied, and appropriate data is returned. (Tri-65305-IJ24732)
Reporting	When exporting a chart and clicking on 'Save as PDF', the chart in TRIRIGA is no longer cut in half. (Tri-65826)
Reporting	For hierarchy objects, you can now delete the parent record after deleting the child record(s) under it. (Tri-66141-IJ26935)
Reporting	An issue in Report Manager related to records from different Modules but with the same Business Object names and labels is now fixed. The filter no longer limits the choices if multiple BOs share the same name. (Tri-66474-IJ26033)
Reporting	The Show More Filters action now works as expected in reports. (Tri-68218)
Reporting	UOM field units no longer show as zero instead of the unit strings when exporting multi business object queries to Excel. (Tri-68527-IJ27410)
Reporting	Query runtime filters, sort settings, prompt-before-query status, and checkbox selection will no longer be persisted when a user navigates away from portal sections and master detail landing pages. This change returns to the previous persistence behavior (pre enhanced renderer) for the master-detail landing pages and portal sections. (Tri-69568-IJ28844; Tri-68438-IJ28478)
Reporting	Number fields display are right-aligned in the enhanced query renderer. (Tri-69775-IJ28865)
Reservations	When you export reservations from My Calendar, the exported list now contains both Date and Time for the reservations. (Tri-80162-IJ33390)
Reservations	Organizer email addresses from iCal notifications now correctly match user emails. (Tri-79282)
Reservations	The Availability tooltip will now properly display on Room Reservation when the tooltip contains a comma. (Tri-77527-IJ37103).
Reporting	An issue has been resolved where inaccurate results were displayed after filtering enhanced query grids with multiple filters defined with the same field in the show more filters bar. (Tri-75082)
Reporting	An issue that could cause the classifications page not to load is resolved. (Tri-71933-IJ31015)
Reporting	An issue that would cause query results that had previously been opened to not reopen the form when clicked on is resolved. (Tri-71981-IJ31244)
Reporting	An issue that would cause the Add to bookmarks button to be displayed on queries in unsupported contexts and regardless of security group settings has been resolved. (Tri-74397-IJ33468)

Area of Change	Description
Reporting	An issue that would cause the Query bookmarks button to be displayed in unsupported contexts like forms and report portal sections is resolved. (Tri-73276-IJ32817)
Reporting	An issue where automatic selection was occurring on pop-up queries containing only one result on a related report has been resolved. (Tri-70334-IJ30623)
Reporting	An issue where prompt field popup queries using the enhanced query grid were not filtering on the value entered in the prompt field has been resolved. (Tri-75310-IJ34624)
Reporting	An issue where the multi-add button on queries was failing to appear in some scenarios has been resolved. (Tri-75542)
Reporting	Better error handling in the API. (Tri-76110-IJ35282)
Reporting	Chart segment is now showing grouped data for null values. (Tri-68753-IJ28629)
Reporting	Column sizing changes are implemented when running reports with the enhanced query grids to handle default column sizes based on the data stored in the columns. (Tri-71982)
Reporting	Document downloads now work in properly configured query sections. (Tri-71222)
Reporting	Editable query actions are now working as per design for queries displayed with the enhanced query grid. (Tri-76703-IJ35595)
Reporting	Metric queries loaded in the Report Manager no longer use a 'select *' SQL when loading parts of the Metric query. (Tri-55722)
Reporting	Query filter issues in reports for different DateTime formats are resolved for relative "Date And Time" fields. (Tri-73896)
Reporting	Radio button selection issue with duplicates record in enhanced report rendering mode is now resolved. (Tri-71549-IJ30579)
Reporting	Records are loading and filters are working correctly when a filter label contains a single apostrophe. (Tri-72251)
Reporting	Report manager will correctly set filter operator for System Read Only fields by default. (Tri-68532-IJ30414)
Reporting	Reports will now run successfully if the BO display mask contains a comma. (Tri-68575-IJ29506; Tri-70496-IJ29963)
Reporting	Resolved a filter issue for Date And Time columns in reports when the user time zone is different than the application server time zone. (Tri-67322-IJ26862)

Area of Change	Description
Reporting	Sorting issue is now resolved for columns with labels that contain special characters. (Tri-73495-IJ32774)
Reporting	The decimal precision from custom display masks for Business Object fields or Form fields will now be honored if different than the UOM display mask. (Tri-68735-IJ29080)
Reporting	The duration in the History tab is now shown in milliseconds instead of nanoseconds. (Tri-72879-IJ34193)
Reporting	The end date filter in the Calendar list view is changed to ensure all hours of the end date are accounted for. (Tri-68829-IJ29183)
Reporting	The horizontal scrollbar displays for editable queries used in related reports. (Tri-65957-IJ25000)
Reporting	The processing spinner works as expected after clicking the email action on manager queries that use the enhanced rendering grid. (Tri-72536)
Reporting	The Query filter issues in reports for different operators are resolved for both relative and non-relative "Date And Time" fields. (Tri-69050)
Reporting	When a 'Classification' type field has a Lookup Query assigned in the Form Builder, it considers the field value for the filter. The filter now displays the correctly filtered result with text value in the runtime filter. (Tri-72409-IJ32206)
Reporting	When users click the Generate Data link on the Hierarchy Structure Details page for a selected Hierarchy (Data Modeler->Utilities->Hierarchy Structures), the following message will now be displayed on the page: "Flat Hierarchy data is being generated. A notification will be sent once the process is complete. You can close this window." In summary, the user can close the window and a notification will be sent to the user when the process is complete. (Tri-76440)
Reservations	A metric chart issue involving bar percent charts with metric thresholds and data values being equal to zero causing browser out of memory errors at runtime is now resolved. (Tri-73768-IJ35190)
Reservations	An AllDay event reserved from Outlook is now reserved as one day in the location's Calendar in TRIRIGA with the following limitation: The time zones for the TRIRIGA login Profile, TRIRIGA Server, and Outlook Client need to be the same. If they are different, then the My Calendar entry will occupy two days. This limitation will be fixed in a future release. (Tri-69925-IJ29727)
Reservations	An issue is resolved where reservation space that was already booked would appear as available to users with different Organization and Geography security group access. This occurred when the space was reserved by users who have an Organization and Geography defined on their profile record. (Tri-74471)
Reservations	Debug logging added to Exchange SOAP envelope. (Tri-76130)
Reservations	In MyCalendar, the DateTime Format will be shown as per the user-selected format. (Tri-66543-IJ25769)

Area of Change	Description
Reservations	For Reservation records created/updated/canceled through foundation TRIRIGA or the Room Reservation perceptive app, the system will now be able to Cancel and Update a corresponding Reservation meeting occurrence by importing into Outlook the resulting .ics file that TRIRIGA sends in the reservation notification. (Tri-68256-IJ29842; Tri-70801-IJ29846)
Reservations	Reservations made from Outlook with attachments and embedded images are now reserved and showing in the location's Calendar in TRIRIGA. (Tri-73429-IJ32482)
Reservations	Reservations made from Outlook with attachments are now reserved and showing in the location's Calendar in TRIRIGA. (Tri-69048-IJ29728)
Reservations	When a reservation is canceled from triReservation UX application, the user will now receive a cancelation .ics file in the email to cancel the reservation. Note: An application change is required to fully fix the reported APAR. (Tri-69171-IJ29717; Tri-70856-IJ29717)
Reservations	Adding a food or equipment order using the TRIRIGA Outlook Add-in now completes successfully. (Tri-62058)
Reservations	Error reporting related to requests for Microsoft OAuth tokens for use with reservations is improved. (Tri-68752)
Reservations	The My Calendar page for creating a reservation in TRIRIGA now displays properly. (Tri-69544)
Security	The Security Manager and form are updated to show only the actions from the business object's state transitions. Duplicate state actions with different capitalization now no longer show and only the correct ones appear in the Security Manager and on the form. (Tri-58046-IJ15308)
Security	In the form builder, you can make changes to the De-associate section action without error. (Tri-66946)
Security	Graphic sections now load after upgrading to 3.7 or later. (Tri-69037-IJ28649)
Security	A user with a Self-Service license will now have Read access to the triCostCode module. (Tri-76480-IJ36204)
Security	Several potential Cross-Site Scripting attacks have been fixed. (Tri-69644; Tri-68618)
Security	An intermittent issue when doing a bulk activation of users has been fixed. Occasionally users were missing from the user query section and/or the user smart section of the group form. When logging in the user is getting security warnings. Now all users should appear in query section and smart section, no security warnings after login. To enable this feature, use the SYNCHRONIZE_ACTIVATE_USER=YES in TRIRIGAWEB.properties. This must be set in ALL TRIRIGA servers. (Tri-74929-IJ35191)
Security	Data validation weakness is resolved. (Tri-69785-IJ29691)

Area of Change	Description
Space	On the main screen page, after clicking the Locator field, the child window opens and remains open, even if you click on the parent window until you cancel the window. The issue is now resolved. (Tri-71067-IJ30743)
UX Perceptive Apps	An issue where the JSESSIONID does not reset when logging into perceptive applications is resolved. (Tri-74603)
UX Room Reservation App	Checks are added when loading the Availability tab for the UX Reserve application ensuring the translation files have data and are accessible by the TRIRIGA user. If no data or not accessible, the UX Reserve application will use internal strings, and no translations will be available. Warnings will be logged in the server.log. (Tri-70477)
UX Framework	Resolved an issue where the screen reader focused and read from the middle of the page (usually details of reservation) while using the Reservation app through the Safari browser on iPhone with voicer over enabled. The screen reader now focuses and reads from the top of the page (the home button). (Tri-80163-IJ36458)
Workflow	The workflow documentation on the IBM Knowledge Center is updated to indicate that Stop tasks do not save all workflow instances. (Tri-68469-IJ28187)
Workflow	Resolved an issue where UX draft mode message helper records were not getting deleted. (Tri-79849)

## Related Documentation

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The IBM TRIRIGA documentation is at <https://www.ibm.com/docs/en/tririga> and the IBM TRIRIGA Application Platform documentation is at <https://www.ibm.com/docs/en/tap>. The documentation is available online in topics or as downloadable PDF files.

Additional documentation, previously available in the IBM TRIRIGA wiki, is available on [IBM TRIRIGA Application Platform 3.8](#). For more information, see the [IBM TRIRIGA Release Information](#) page on IBM Support.

## Support

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IBM Software Support provides assistance with product defects, answering FAQs, and performing rediscovery. View the IBM Software Support site at [www.ibm.com/support](http://www.ibm.com/support).

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